



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-1253; Directorate Identifier 2011-NM-079-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Airbus Model A319, A320, and A321 airplanes that would supersede an existing AD. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Several cases of corrosion of the Main Landing Gear (MLG) support Rib 5 fitting lug bores have been reported on A320 family aeroplanes. * * * If not detected, the cracking may lead to the complete failure of the fitting and thus could affect the structural integrity of the MLG installation.

EASA AD 2007-0213 was issued to address this condition
* * *.

After that AD was issued, a case of Rib 5, ruptured at the 4 o'clock position, was discovered on an aeroplane on which the terminating action of EASA AD 2007-0213 had already been embodied * * *.

Investigation of that case revealed that corrosion damage and cracking that should have been removed by repair machining was below the level of detectability of the Non

Destructive Test (NDT) technique that cleared the surfaces prior to bush installation.

* * * * *

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Airbus, Airworthiness Office – EAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: account.airworth-eas@airbus.com; Internet <http://www.airbus.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind

Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-227-1405; fax: 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-1253; Directorate Identifier 2011-NM-079-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On March 31, 2008, we issued AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008). That AD required actions intended to address an unsafe condition on Airbus Model A318, A319, A320, and A321 airplanes.

Since we issued AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008), we have been advised that the existing AD is inadequate to address the unsafe condition. We have determined that certain airplanes need additional detailed inspections for cracks of the MLG support 5 fitting, and repair of any cracks found. The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2011-0011, dated January 21, 2011 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Several cases of corrosion of the Main Landing Gear (MLG) support Rib 5 fitting lug bores have been reported on A320 family aeroplanes. In some instances, corrosion pits caused the cracking of the forward lug (sometimes through its complete thickness). If not detected, the cracking may lead to the complete failure of the fitting and thus could affect the structural integrity of the MLG installation.

EASA AD 2007-0213 [dated August 7, 2007, which corresponds to FAA AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008)] was issued to address this condition and required a repetitive inspection

program of the MLG support Rib 5 fitting forward lugs and, as terminating action, the embodiment of Airbus Service Bulletin (SB) A320-57-1118.

After that [EASA] AD was issued, a case of Rib 5, ruptured at the 4 o'clock position, was discovered on an aeroplane on which the terminating action of EASA AD 2007-0213 had already been embodied in accordance with Airbus SB A320-57-1118.

Investigation of that case revealed that corrosion damage and cracking that should have been removed by repair machining was below the level of detectability of the Non Destructive Test (NDT) technique that cleared the surfaces prior to bush installation.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

It has also been established that all A318 aeroplanes have had Airbus modification 32025 embodied in production on both LH and RH wings, which is a one-way interchangeable (non-reversible) modification. Consequently, the unsafe condition addressed by AD 2007-0231 cannot occur or develop on those aeroplanes.

For the reasons described above, this AD, which supersedes EASA AD 2007-0213:

- retains the requirements of EASA AD 2007-0213 for aeroplanes on which the MLG Rib Bushes have not been modified/repared in accordance with the instructions of Airbus SB A320-57-1118, or Airbus SRM 57-26-13, or the identified Airbus Repair Instructions, as applicable, and
- requires, for all aeroplanes on which Airbus SB A320-57-1118 has been embodied in service, or on which Airbus SRM 57-26-13 or the identified Airbus Repair Instructions have been applied, a repetitive inspection program [for cracks] of the MLG support Rib 5 fitting forward lugs and, depending on findings, the accomplishment of the associated corrective actions [i.e., repair], and
- reduces the Applicability by deleting A318 aeroplanes.

You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Airbus has issued Mandatory Service Bulletins A320-57-1118, Revision 04, dated June 4, 2008; and A320-57A1166, dated January 12, 2011. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have proposed different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a NOTE within the proposed AD.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would affect about 740 products of U.S. registry.

The actions that are required by AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008), and retained in this proposed AD take about 73 work-hours per product, at an average labor rate of \$85 per work hour. Required parts would cost about \$3,860 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, the estimated cost of the currently required actions is \$10,065 per product.

We estimate that it would take about 3 work-hours per product to comply with the new basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the new actions in this proposed AD on U.S. operators to be up to \$188,700, or \$255 per product.

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Amendment 39-15456 (73 FR 19975, April 14, 2008) and adding the following new AD:

Airbus: Docket No. FAA-2011-1253; Directorate Identifier 2011-NM-079-AD.

Comments Due Date

- (a) We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

Affected ADs

- (b) This AD supersedes AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008).

Applicability

- (c) This AD applies to Airbus Model A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320 -211, A320 -212, A320-214, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232 airplanes; certificated in any category, except airplanes on which Airbus modification 32025 has been accomplished in production.

Subject

(d) Air Transport Association (ATA) of America Code 57: Wings.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Several cases of corrosion of the Main Landing Gear (MLG) support Rib 5 fitting lug bores have been reported on A320 family aeroplanes. * * * If not detected, the cracking may lead to the complete failure of the fitting and thus could affect the structural integrity of the MLG installation.

EASA AD 2007-0213 was issued to address this condition * * *.

After that [EASA] AD was issued, a case of Rib 5, ruptured at the 4 o'clock position, was discovered on an aeroplane on which the terminating action of EASA AD 2007-0213 had already been embodied * * *.

Investigation of that case revealed that corrosion damage and cracking that should have been removed by repair machining was below the level of detectability of the Non Destructive Test (NDT) technique that cleared the surfaces prior to bush installation.

* * * * *

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

RESTATEMENT OF CERTAIN REQUIREMENTS OF AD 2006-11-04, AMENDMENT 39-14608 (71 FR 29578, MAY 23, 2006), WITH CHANGES TO NDT REFERENCES

Repetitive Detailed Inspections

(g) Within 8 days after June 7, 2006 (the effective date of AD 2006-11-04, Amendment 39-14608 (71 FR 29578, May 23, 2006)), or before further flight after a hard

landing, whichever is first: Perform a detailed inspection for cracking in the forward lug of the support rib 5 fitting of the left- and right-hand MLG, and, if any crack is found, replace the MLG fitting with a new fitting before further flight, in accordance with a method approved by either the Manager, International Branch, ANM-116, FAA; or the European Aviation Safety Agency (EASA) (or its delegated agent); or in accordance with the actions specified in the Airbus A318/A319/A320/A321 Nondestructive Testing Manual, Chapter 51-90-00, Revision dated February 1, 2003. Repeat the inspection thereafter at intervals not to exceed 8 days, or before further flight after a hard landing, whichever is first. As of May 19, 2008 (the effective date of AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008)), the repetitive inspections required by paragraph (k) of this AD must be accomplished in lieu of the repetitive inspections required by this paragraph.

Note 1: For the purposes of this AD, a detailed inspection is: “An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required.”

Optional Inspection Method

(h) Performing an ultrasonic inspection for cracking in the forward lug of the support rib 5 fitting of the left- and right-hand MLG in accordance with a method approved by the Manager, International Branch, ANM-116, or the EASA (or its delegated agent; or in accordance with the Airbus A318/A319/A320/A321

Nondestructive Testing Manual, Chapter 57-29-03, Revision dated February 1, 2005 (for Model A318, A319, and A320 airplanes), or Chapter 57-29-04, Revision dated May 1, 2005 (for Model A321 airplanes); or in accordance with Task 57-29-03-270-801-A-01, Inspection of the Gear Rib Forward and Aft Lug Attachment for the Main Gear, of Chapter 57, Wings, of the Airbus A318/A319/A320/A321 Nondestructive Testing Manual, Revision 89, dated August 1, 2011; as applicable; is an acceptable alternative method of compliance for the initial and repetitive inspections required by paragraph (g) of this AD. As of the effective date of this AD, only Task 57-29-03-270-801-A-01, Inspection of the Gear Rib Forward and Aft Lug Attachment for the Main Gear, of Chapter 57, Wings, of the Airbus A318/A319/A320/A321 Nondestructive Testing Manual, Revision 89, dated August 1, 2011, may be used.

Optional Terminating Action

(i) Repair of the forward lugs of the support rib 5 fitting of the left- and right-hand MLG, done before the effective date of this AD in accordance with a method approved by the Manager, International Branch, ANM-116; or the EASA (or its delegated agent); or in accordance with Airbus A319 Structural Repair Manual (SRM), Paragraph 5.C., 57-26-13, Revision November 1, 2004; Airbus A320 SRM, Paragraph 5.D, 57-26-13, Revision November 1, 2004; or Airbus A321 SRM, Paragraph 5.D, 57-26-13, Revision February 1, 2005; as applicable; constitutes terminating action for the requirements of paragraphs (g), (h), (k), (l), and (m) of this AD.

RESTATEMENT OF REQUIREMENTS OF AD 2008-08-04, AMENDMENT 39-15456 (73 FR 19975, APRIL 14, 2008), WITH REVISED AFFECTED AIRPLANES:

Referenced Conditions

(j) To identify affected airplanes in paragraphs (k), (m), and (o) of this AD, this AD refers to the following conditions:

(1) Airplanes on which the modification of the MLG rib bushes as specified in Airbus Service Bulletin A320-57-1118 has been done.

(2) Airplanes on which a repair of the MLG support rib 5 fitting specified in Airbus A319 Structural Repair Manual (SRM) 57-26-13, paragraph 5.C; or Airbus A320/A321 SRM 57-26-13, paragraph 5.D; or Airbus Repair Instruction R572-58376, Issue C, dated October 15, 2000; has been done.

(3) Airplanes on which replacement in service of the MLG support rib 5 as specified in Airbus Repair Instructions R572-58507 and R572-58209, or Airbus Repair Instructions R572-45020 and R572-45019, as applicable, has been done.

Repetitive Inspections

(k) For airplanes on which none of the actions specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD have been done: At the applicable time specified in table 1 of this AD, or before further flight after a hard landing, whichever is first, do a visual inspection or ultrasonic inspection for cracking in the forward lug of the support rib 5 fitting of the left and right MLG, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-57-1138, Revision 01, dated October 27, 2006. Repeat the inspection thereafter at the applicable interval specified in table 1 of this AD or before further flight after a hard landing, whichever is first, until the modification required by

paragraph (m) of this AD has been accomplished. Accomplishing the initial inspection terminates the requirements of paragraph (g) of this AD.

Table 1 – Compliance Times

Airplanes	Initial Inspection	Repetitive Interval
Model A319 and A320 airplanes	If the most recent inspection is a detailed inspection done in accordance with paragraph (g) of this AD, inspect within 150 flight cycles after the most recent detailed inspection.	Within 150 flight cycles after a visual inspection
	If the most recent inspection is an ultrasonic inspection done in accordance with paragraph (h) of this AD, inspect within 940 flight cycles after the most recent ultrasonic inspection.	Within 940 flight cycles after an ultrasonic inspection
Model A321 airplanes	If the most recent inspection is a detailed inspection done in accordance with paragraph (g) of this AD, inspect within 100 flight cycles after the most recent detailed inspection.	Within 100 flight cycles after a visual inspection
	If the most recent inspection is an ultrasonic inspection done in accordance with paragraph (h) of this AD, inspect within 630 flight cycles after the most recent ultrasonic inspection.	Within 630 flight cycles after an ultrasonic inspection

Corrective Action

(l) If any cracking is found during any inspection required by paragraph (k) of this AD: Before further flight, repair or replace the cracked MLG fitting using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or the EASA (or its delegated agent).

Rib Bushing Modification

(m) Except for airplanes on which the actions specified in paragraph (j)(3) have been done: Within 60 months after May 19, 2008, modify the rib bushings of the left and right MLG, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Airbus Service Bulletin A320-57-1118, Revision 03, dated April 23, 2007; or Revision 04, dated June 4, 2008. Accomplishing this modification terminates the requirements of paragraphs (g) and (k) of this AD, and then the requirements of paragraph (o) of this AD must be done.

Credit for Actions Done According to Previous Issue of Service Bulletin

(n) Modifying the lugs of the support rib 5 fitting of the left and right MLG is acceptable for compliance with the requirements of paragraph (m) of this AD if done before May 19, 2008, in accordance with one of the following service bulletins: Airbus Service Bulletin A320-57-1118, dated September 5, 2002; Revision 01, dated August 28, 2003; or Revision 02, dated August 2, 2006.

NEW REQUIREMENTS OF THIS AD

Post-modification/Post-repair Inspections

(o) For airplanes on which the actions specified in paragraph (j)(1) or (j)(2) of this AD have been done: At the later of the times specified in paragraphs (o)(1) and (o)(2) of this AD, do a detailed inspection for cracks of the forward lug of each left-hand and right-hand MLG support rib 5 fitting, in accordance with Airbus Service Bulletin A320-57A1166, dated January 12, 2011. Repeat the inspection thereafter at intervals not to exceed 500 flight cycles.

(1) Within 2,000 flight cycles after accomplishing the modification specified in paragraph (j)(1) or (m) of this AD, or the repair specified in paragraph (j)(2) of this AD, as applicable.

(2) Within 250 flight cycles after the effective date of this AD, without exceeding 3 months after the effective date of this AD.

(p) If any crack is detected during any inspection required by paragraph (o) of this AD: Before further flight, repair using a method approved by either the Manager, International Branch, ANM-116, FAA; or EASA (or its delegated agent).

Optional Terminating Action

(q) Replacement of a MLG support rib 5 fitting at any position (LH or RH) as specified in paragraph (j)(3) of this AD terminates the requirements of this AD for the MLG support rib 5 fitting at that position.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: Although the MCAI or service information allows further flight after cracks are found during compliance with certain required actions, paragraphs (l) and (p) of this AD require repair or replacement before further flight.

Other FAA AD Provisions

(r) The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as

appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-227-1405; fax: 425-227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD. AMOCs approved previously in accordance with AD 2006-11-04, Amendment 39-14608 (71 FR 29578, May 23, 2006), and AD 2008-08-04, Amendment 39-15456 (73 FR 19975, April 14, 2008), are not approved as AMOCs for the corresponding provisions of this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to ensure the product is airworthy before it is returned to service.

Related Information

(s) For related information, refer to MCAI EASA Airworthiness Directive 2011-0011, dated January 21, 2011; Airbus Service Bulletin A320-57-1118, Revision 03, dated April 23, 2007, Airbus Mandatory Service Bulletin A320-57-1118, Revision 04, dated June 4, 2008; Airbus Service Bulletin A320-57-1138, Revision 01, dated October 27, 2006; Airbus A319 Structural Repair Manual (SRM), Paragraph 5.C., 57-26-13, Revision dated November 1, 2004; Airbus A320 SRM, Paragraph 5.D.,

57-26-13, Revision dated November 1, 2004; Airbus A321 SRM, Paragraph 5.D.,
57-26-13, Revision dated February 1, 2005; and Task 57-29-03-270-801-A-01,
Inspection of the Gear Rib Forward and Aft Lug Attachment for the Main Gear, of
Chapter 57, Wings, of the Airbus A318/A319/A320/A321 Nondestructive Testing
Manual, Revision 89, dated August 1, 2011.

Issued in Renton, Washington, on November 14, 2011.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2011-30223 Filed 11/22/2011 at 8:45 am; Publication Date: 11/23/2011]